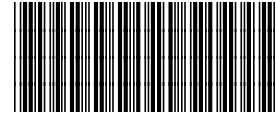


MAINVIEW® for DB2

Release Notes

Version 6.1.00

May 17, 2000



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MAINVIEW for DB2 version 6, release 1 and RxD2™ version 2, release 1 contain many new and improved features and functions. This document summarizes these enhancements so you can quickly see what's new.

If you are using MAINVIEW for DB2 or RxD2 for the first time, you might want to read this document to get an idea about the latest features these products offer.

If you are currently using MAINVIEW for DB2 5.1 or earlier, or RxD2 2.1 or earlier, you should read this document to learn about what's new or changed.

If you are installing MAINVIEW for DB2 6.1 from an earlier release, you should read this document and "Part 1. Preparing for Customization" in the *MAINVIEW® for DB2 Customization Guide*.

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Documentation Guide

A complete set of product manuals is shipped with your MAINVIEW for DB2 products. Table 1 and Table 2 are provided to help you decide when to use each of these documents. Table 1 shows you which documents to use when performing administrative tasks and Table 2 on page 4 summarizes documentation for user tasks. Figure 1 on page 5 summarizes graphically how to use all the books in the MAINVIEW library.

If you need to perform administrative tasks, such as product installation, customization, or security implementation, use Table 1 as a guide.

Table 1 Administrator Documentation

Task	Name of Book
Install Products	<ul style="list-style-type: none">• <i>MAINVIEW® for DB2 Release Notes</i>• <i>Installation Checklist</i>• <i>Product Installation and Maintenance Guide</i>
Prepare MAINVIEW Environment	<ul style="list-style-type: none">• <i>MAINVIEW® Implementation Guide</i>
Customize Products	<ul style="list-style-type: none">• <i>MAINVIEW for DB2 Customization Guide</i>• <i>RxD2™ User Guide</i>
Optional: Customize MAINVIEW Alternate Access	<ul style="list-style-type: none">• <i>MAINVIEW® Alternate Access Implementation and User Guide</i>
Optional: Establish SAF Security for MAINVIEW Products	<ul style="list-style-type: none">• <i>Implementing Security for MAINVIEW® Products</i>
Maintain MAINVIEW Environment	<ul style="list-style-type: none">• <i>MAINVIEW® Administration Guide</i>

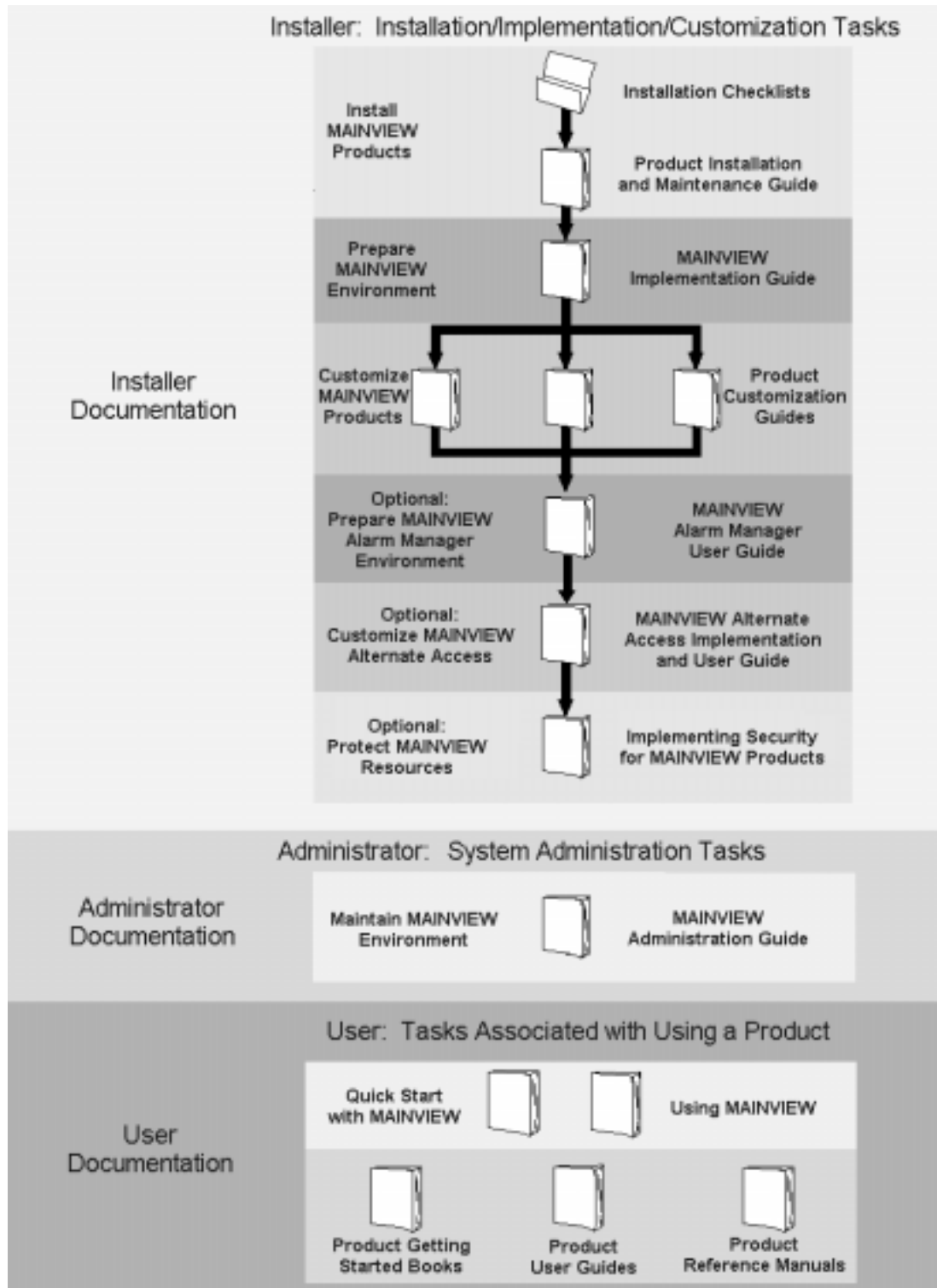
To make it easier to use your MAINVIEW for DB2 products, use Table 2 as a guide.

Table 2 User Documentation

Task	Name of Book
See What's New	<ul style="list-style-type: none">• <i>MAINVIEW for DB2 Release Notes</i>
Learn How to Use the Products	<ul style="list-style-type: none">• <i>Quick Start with MAINVIEW®</i>• <i>Using MAINVIEW®</i>• <i>Getting Started with MAINVIEW® for DB2 and RxD2™</i>
Use MAINVIEW for DB2: Online displays Application traces Views Batch reports Catalog/Explain tools	<ul style="list-style-type: none">• <i>MAINVIEW® for DB2 User Guide Volume 1: Overview/Analyzers/Monitors</i>• <i>MAINVIEW® for DB2 User Guide Volume 2: Traces</i>• <i>MAINVIEW® for DB2 User Guide Volume 3: Views</i>• <i>MAINVIEW® for DB2 Performance Reporter User Guide</i>• <i>RxD2 User Guide</i>

Figure 1 summarizes how to use all the books in the MAINVIEW library.

Figure 1 Organization of MAINVIEW Documentation



MAINVIEW for DB2 Changes

MAINVIEW for DB2 6.1 provides support for DB2 version 6, in addition to DB2 3.1, 4.1, and 5.1. It also supports IMS 6.1 and 7.1 and CICS/TS 1.3, as well as earlier supported releases of IMS and CICS.

A BBI-SS PAS can connect DB2 subsystems at two release levels (DB2 4.1, DB2 5.1, DB2 6.1) if the proper CAF compatibility PTFs are applied to DB2.

The following enhancements are included in this release:

Version 6 Support

DB2 Version 6 Support

All existing areas of MAINVIEW for DB2 (views, analyzers, monitors, background exceptions, application traces, and Performance Reporter) provide full exploitation support of new DB2 6.1 features.

- All new statistics values are available in windows mode for the DB2 subsystem, the buffer pools, and the group buffer pools.
- The new 8 K and 16 K buffer pool types are supported.
- New monitors provide exception monitoring for DB2 6.1 features such as triggers and LOBs.
- Application traces display all new accounting data as well as additions to detail trace events.
- Performance Reporter tables and reports include all new DB2 6.1 information.

Pending DB2 6.1 Updates

BMC Software is continuing to monitor the IBM changes to DB2 6.1 and will provide PTFs as they become necessary.

History Records

History Record Compression

The windows mode history records are now being compressed.

Data Export

New EXPort Command

A new EXPort command allows you to save query data to a data set or SYSOUT class. The exported data can be used to supplement performance reports or can be downloaded to a workstation for use with a spreadsheet application. For details on the use of the new EXPort command, see Chapter 4 in the *Using MAINVIEW* book.

New Status Views

New Views Show Authorization Checks and Routine Activity

The EZDSTAT and EZDSTATD Easy Menus have two new options for Authorization Checks and Routine Activity. They provide access to four new status views:

- STAUTH (Authorization Checks) and STAUTHD (Authorization Checks—Detail) provide statistics about authorization checks for PLANs, packages, and user-defined function or stored procedure routines.
- STROUT (Routine Statistics) and STROUTD (Routine Statistics—Detail) provide statistics about cascading, stored procedure, trigger, and user-defined function routines.

Revised Status Views

New DB2 Subsystem Statistics Values

Sixteen Status views show new DB2 subsystem statistics values:

- STCMDS (DB2 Commands) and STCMDSD (DB2 Commands—Detail) show values for several new commands.
- STDB2SYS (DB2 System Information) and STDBSYSD (DB2 System Information—Detail) show the maximum storage used for LOB values.
- STDIST (DBAT Statistics) and STDISTD (DBAT Statistics—Detail) are reorganized to show both current and maximum values for both type 1 and type 2 database active threads. They also show new fields for terminated connections and DBAT slots not used.

- STEDMP (EDM Pool Statistics) and STEDMPD (EDM Pool Statistics—Detail) show new fields for data space usage.
- STGBFRPL (Global Buffer Pool Statistics) and STGBFRPD (Global Buffer Pool Statistics—Detail) show new fields for explicit cross-invalidations and secondary group buffer pool statistics.
- STQPAR (Query Parallelism) and STQPARD (Query Parallelism—Detail) show new fields for recalculations due to sysplex configuration and buffer pool constraints.
- STSQL (SQL Counts) and STSQLD (SQL Counts—Detail) show values for numerous new SQL statements. They also show new fields for direct row access.
- STLOG (Log Statistics) and STLOGD (Log Statistics—Detail) show new fields for log activity.

Revised Buffer Pool Views

New Buffer Pool Values

Two Buffer Pool views are updated:

- BFRPL (Buffer Pool Statistics—SSI) and BFRPLD (Local Buffer Pool Statistics—Detail) show new fields for the type of virtual buffer pool (VPOOL or data space), the page stealing algorithm, and the pool vertical write threshold.

Revised Group Buffer Pool Views

New Group Buffer Pool Values

Seven Group Buffer Pool views are updated:

- GBPGSTZ (Group Buffer Pool Group Coupling Facility Status) and GBPGSTD (Group Buffer Pool Group Coupling Facility Status—Detail) show new fields for current GBPCACHE setting, GBP duplex or simplex indicator, secondary GBP size, secondary GBP directory entries, and secondary GBP data entries.
- GBPGACZ (Group Buffer Pool Group Coupling Facility Activity) and GBPGACD (Group Buffer Pool Group Coupling Facility Activity—Detail) show new fields for explicit XI, and various values for secondary group buffer pool access.
- GBPWRITM (Group Buffer Pool Write Activity) and GBPWRITZ (Group Buffer Pool Write Activity—Summary) show new fields for duplexing requests, duplexing request failures, and suspended completion checks.
- GBPACTD (Group Buffer Pool Activity—Detail) shows new fields for explicit cross-invalidations and secondary group buffer pool requests.

New ZPARM Views

New Views Show DB2 Installation Parameters

The new EZDZPARM Easy Menu provides access to 20 new windows mode ZPARM views, which provide information about the installation parameters in these categories:

- DB2 System, which includes DB2 Definitions, System Definitions, Trace Parameters, Data Sharing, and Thread Parameters views
- Locking, which includes IRLM Definitions and IRLM—Lockout Detection views
- Logging, which includes Active Log Definitions, Archive Log Definitions, and Archive Log Allocation Definitions views
- Distributed, which includes the DDF—Distributed Data Facility view
- Storage and Data Sets, which includes Storage Related Parameters, Data Set Management, Buffer Manager, and Data Definition Control views
- Authorization, which includes Authorization and Resource Limit Facility (RLF) views
- Application-Related, which includes Query Parallelism, Routine Parameters (Stored Procedures/UDFs), and DSNHDECP—Application Programming Defaults views

Statistics Hyperlinks and an Index View Provide Enhanced Usability

These new views also provide hyperlinks to related statistics views or tuning wizards to simplify analysis of the effects of various parameters on DB2 performance.

An index view provides an alphabetical list of all ZPARM names with hyperlinks to the view where they are displayed.

In addition, each view includes NEXT and PREV hyperlinks to simplify browsing through several or all views without returning to the easy menu.

Actions Invoke OPERTUNE to Dynamically Change ZPARM Values

Shortly after GA, an interface to the OPERTUNE product (if installed) will be provided from the new ZPARM views. It will allow many installation parameters to be modified by simply overtyping the existing value. Once this feature is available, the modifiable fields will be displayed in green, the default for fields with a defined action.

Of course, the ability to issue actions and invoke OPERTUNE will be subject to OPERTUNE and MAINVIEW action security and must be enabled before it can be used by anyone.

Analyzers

Analyzer Displays Provide DB2 6.1 Data and Additional Enhancements

- CICSx services provide new data for CICS/TS 1.2 and 1.3. (This data has also been delivered by PTF to MAINVIEW for DB2 5.1.)
- DUSER shows new accounting fields, such as the expanded class 3 elapsed wait times.

DUSER also includes a revised section for routines, which displays data about

- Stored procedures
- Functions
- Triggers

This section can be accessed by a new RTN expand button (which replaces the SPAS expand button).

Monitors

Monitors Provide Detailed Exception Warnings for DB2 6.1

- All buffer pool monitors support the new DB2 6.1 buffer pools.
- Nine new resource monitors provide exception monitoring of new DB2 6.1 features. They include
 - Direct row access
 - Trigger usage
 - Maximum nested SQL level
 - User-defined function usage
 - EDM pool data space percent utilization
 - Secondary group buffer pool coupling facility write failures
 - Connections terminated due to maximum type 1 inactive threads
 - DBATs queued because MAXDBAT limit reached
 - Maximum LOB storage

Since these are specialized DB2 features that not everyone will use, these new monitors have not been added to the default startup set in BLKDMRW.

- NACTC and SPROC have additional parameters to include DB2 6.1 information.

Trace

Application Trace Includes DB2 6.1 Accounting Data

- STRAC and TSTAT show new accounting fields, such as the expanded class 3 elapsed wait times.

They also include a revised section for routines, which displays data about

- Stored procedures
- Functions
- Triggers

This section can be accessed by a new RTN expand button (which replaces the SPAS expand button).

- TSUMR can now be summarized by correlation ID for improved viewing of CICS trace information.
- Several new and modified detail trace events, pop-ups, and event summaries support
 - User-defined functions
 - Triggers
 - New SQL and scan counts
 - LOBs
 - Other new DB2 6.1 options

Performance Reporter Tables

New Tables and Column Definitions

New accounting and statistics tables must be created to enable complete DB2 version 6 reporting:

- Many new columns are available in the accounting and statistics tables to provide DB2 Version 6 data.
- The buffer pool 4 K and 32 K totals per subsystem that were previously kept in the DMRSBFFR table have been combined into one set of totals and included in the DMRSTAT table to simplify subsystem-level reporting. The Pool Detail Buffer Statistics Table per buffer pool (DMRSBFDT) is still available, and supports the 8 K and 16 K pool types. The buffer pool 4 K and 32 K totals in the accounting tables (DMRACxxx) have also been combined.
- Index keys have been changed to use location instead of MVS system ID as the first key. Since location is equivalent to group name for summarization, this will make data sharing reporting easier.
- If you choose to create new tables, a table migration aid is available to help you migrate your Performance Reporter tables from MVDB2 release 5.1 to release 6.1.

Performance Reporter Reports

Improved Package Reporting

A new filter for the SMF accounting reports improves reporting for packages.

New and Revised Reports

The batch reports produced by Performance Reporter from SMF and from DB2 tables now include the new DB2 6.1 fields.

RxD2 Changes

Release 2.1 of RxD2 provides support for DB2 3.1, 4.1, 5.1, and 6.1. DB2 release 2.3 is no longer supported. RxD2 2.1 requires release 4.1 or later of MAINVIEW for DB2 for hyperlink support.

DB2 6.1 Support

Support for DB2 Version 6

- All current functions are tolerant of DB2 6.1.
- The EXPLAIN PLAN_TABLE function is updated to reflect changes for DB2 6.1.

Documentation Changes

The following changes have been made to the documentation libraries for MAINVIEW for DB2 release 6.1 and RxD2 release 2.1:

- Customization Guide

The *MAINVIEW for DB2 Customization Guide* is updated. Be sure to review the instructions about “Preparing for Customization” in Part 1.

- User Guides

The following volumes of the *MAINVIEW for DB2 User Guide* are updated for this release:

- Volume 1: Overview/Analyzers/Monitors
- Volume 2: Traces
- Volume 3: Views

The *MAINVIEW for DB2 Performance Reporter User Guide* is also updated, with extensive changes to the “Performance Data Tables” section in Part 4 and to the reports from SMF and DB2 tables in Parts 2 and 3.

The *RxD2 User Guide* remains unchanged.

- Release Notes

This document is updated to give you a quick overview of the new features of MAINVIEW for DB2, release 6.1, and RxD2, release 2.1.

It replaces the former document, *MAINVIEW® for DB2 New Release Information*.

- Getting Started

Getting Started with MAINVIEW for DB2 and RxD2 provides updated tutorials that guide you through many of the new features of MAINVIEW for DB2, RxD2, and the hyperlinks between them. It also provides scenarios to help you use the new windows-mode views to solve problems and maximize performance.

A new chapter is added with scenarios that teach you how to print both your online and offline reports. Information is included to help you

- Print an online history trace and export an online view for offline review
- Print offline traces from a trace log data set or SMF records
- Print offline Performance Reporter reports from both SMF data and DB2 tables

Where to Get the Latest Product Information

To view the latest BMC Software documents, visit the support page on the BMC Software Web site at <http://www.bmc.com/support.html>. Log on and select a product to access the related documentation. (To log on, first time users can request a user name and password either by registering at the support page or by contacting a BMC Software sales representative.)